

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) An end cap for a segment of a segmented stator in an electromagnetic machine, the machine having a plurality of interconnect wires and a central axis, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon, the end cap comprising:

a body portion positioned adjacent the yoke portion and having an inboard side;

an inboard wall positioned adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion; and

at least one router positioned on the end cap for routing ~~one or more of the~~ interconnect wires between portions of the stator, the at least one router including a first ledge and a second ledge spaced from the first ledge in the axial direction for capable of separating at least two the interconnect wires in the axial direction when the at least two interconnect wires are routed adjacent one another on the at least one router.

2. (original) The end cap of claim 1, wherein the inboard wall extends a first height from the tooth portion that is substantially equivalent to a second height that the inboard side of the body portion extends from the yoke portion.

3. (currently amended) An end cap for a segment of a stator in an electromagnetic machine, the machine having a plurality of interconnect wires, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon, the end cap comprising:

a body portion positioned adjacent the yoke portion and having an inboard side;

an inboard wall positioned adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion;

at least one router positioned on the end cap for routing one or more of the interconnect wires between portions of the stator. ~~The end cap of claim 1,~~ wherein the at least one router is positioned on the inboard wall of the end cap and extends from a side edge of the inboard wall.

4. (original) The end cap of claim 1, wherein the at least one router is positioned on the body portion of the end cap.

5. (original) The end cap of claim 4, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the at least one router positioned on the body portion of the end cap is capable of routing the interconnect wire between the wire pocket and other portions of the stator.

6. (canceled)

7. (canceled)

8. (currently amended) An end cap for a segment of a stator in an electromagnetic machine, the machine having a plurality of interconnect wires and a central axis, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon, the end cap comprising:
a body portion positioned adjacent the yoke portion and having an inboard side;
an inboard wall positioned adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion;
at least one router positioned on the end cap for routing one or more of the interconnect wires between portions of the stator ~~The end cap of claim 6~~, wherein the at least one router includes a first ledge, a second ledge spaced from the first ledge in the axial direction, and a catch hook for positioning at least one of the interconnect wires on at least one of the ledges.

9. (currently amended) ~~The end cap of claim 1~~ 6, wherein the at least one router defines a notch for positioning at least one of the interconnect wires on at least one of the ledges.

10. (original) The end cap of claim 1, wherein the at least one router is positioned on an outboard surface of the inboard wall.

11. (currently amended) The end cap of claim 9 10, wherein ~~the at least one router positioned on the outboard surface of the inboard wall includes~~ the first and second ledges are positioned adjacent opposite side edges of the inboard wall for separating at least two of the interconnect wires when routed adjacent the outboard surface of the inboard wall.

12. (canceled)

13. (currently amended) An end cap for a segment of a segmented stator in an electromagnetic machine, the machine having a plurality of interconnect wires, the segment having a yoke portion and a tooth portion with a winding coil wound thereon, the end cap comprising:

a body portion positioned adjacent the yoke portion and having an inboard side;

an inboard wall positioned adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion; and

an inboard router positioned on the inboard wall and including a first ledge capable of routing one ~~or more~~ of the interconnect wires between portions of a further distance from the stator, and a second ledge capable of routing another one of the

interconnect wires a closer distance from the stator.

14. (original) The end cap of claim 13, wherein the inboard wall extends a first height from the tooth portion that is substantially equivalent to a second height that the inboard side of the body portion extends from the yoke portion.

15. (original) The end cap of claim 13, wherein the inboard router extends from a side edge of the inboard wall.

16. (cancelled)

17. (cancelled)

18. (currently amended) The end ~~cap~~ slap of claim ~~13~~ 46, wherein the inboard router includes a catch ~~hook~~ for positioning at least one of the interconnect wires on at least one of the ledges.

19. (original) The end cap of claim 13, further comprising an outboard router positioned on the body portion of the end cap and capable of routing one or more of the interconnect wires between portions of the stator.

20. (original) The end cap of claim 19, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the outboard router is capable of routing the one interconnect wire between the wire pocket and other portions of the stator.

21. (original) The end cap of claim 19, wherein the outboard router includes first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the outboard router.

22. (original) The end cap of claim 21, wherein the outboard router defines a notch for positioning at least one of the interconnect wires on at least one of the ledges.

23. (original) The end cap of claim 13, wherein the inboard router is positioned on an outboard surface of the inboard wall.

24. (currently amended) The end cap of claim 23, ~~wherein the further~~
comprising a second inboard router includes having first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the second inboard router.

25. (currently amended) The end cap of claim 23, wherein the first ledge is positioned adjacent the inboard router on one side edge of the inboard wall, and wherein the second ledge is positioned adjacent an opposite side edge of the inboard wall.

26. (canceled)

27. (currently amended) A stator for an electromagnetic machine having a plurality of interconnect wires and winding coils, comprising:

a plurality of segments of the stator, each segment having a yoke portion and having a tooth portion with one of the winding coils wound thereon;

a plurality of end caps, each end cap comprising:

a body portion positioned adjacent the yoke portion of one of the segments and having an inboard side such that the winding coil wound on the tooth portion is at least partially positioned adjacent the inboard side of the body portion,

a wire pocket formed in the end cap for holding an end of the winding coil and a portion of one of the interconnect wires, and

an edge positioned on the inboard side of the body portion and positioned adjacent the wire pocket on the end cap, the edge capable of bending the interconnect wire routed between the wire pocket and another portion of the stator. ~~The stator of claim 26,~~ wherein a tip of the edge extends extending beyond the body portion for positioning the interconnect wire in the wire pocket of the end cap during an automated

procedure.

28. (canceled)

29. (currently amended) The machine of claim 30, wherein ~~the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the end cap includes means on the end cap for bending~~ one of the interconnect wires between the wire pocket and another portion of the stator.

30. (currently amended) An electromagnetic machine, comprising:
a stator having a segment, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon; and
an end cap positioned on the segment and including:
a body portion positioned adjacent the yoke portion,
an inboard wall positioned adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the body portion.

~~The machine of claim 28, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the end cap includes~~
means on the end cap for aligning said one of the interconnect wires with the wire pocket when automatically inserting a connector into the pocket.

31-38 (canceled)

39. (new) The end cap of claim 1 wherein the router is positioned on said inboard wall.

40. (new) The end cap of claim 39 wherein the router extends from a side edge of the inboard wall.

41. (new) The end cap of claim 1 wherein the router includes a catch for positioning at least one of the interconnect wires on at least one of the ledges.

42. (new) A segmented stator comprising the end cap of claim 1.

43. (new) An electromagnetic machine comprising the segmented stator of claim 42.

44. (new) The end cap of claim 1 wherein the router is integral with the end cap.

45. (new) The end cap of claim 13 wherein the inboard router is integral with the inboard wall.